This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Original) A method of scheduling data transmissions in a wireless data network, comprising:

(a) receiving a request to transmit data of a size s to a receiver;

(b) using the request size s and transmission characteristics to the receiver to select overall power and number of codes to assign to the request over an entire schedule;

(c) rounding results from step (b) so that every selected code is assigned a power that achieves a feasible data rate; and

(d) allocating the results of step (c) in each scheduling frame in accordance with a quality of service metric.

2. (Original) The method of claim 1 wherein the overall power and the number of codes is selected using resource augmented competitive analysis.

3. (Currently Amended) The method of claim 2 wherein the overall power p and the number of codes k is selected to minimize the following expression:

$$\frac{P_j^c}{P} + \frac{k_j^c}{C}$$

where P is the total power that can be transmitted and C is the total number of codes that can be assigned to receivers in a time frame in the schedule.[[.]]

4. (Original) The method of claim 3 wherein p and k are selected with respect to a resource-augmented demand.

5. (Original) The method of claim 1 wherein the quality of service metric comprises minimizing maximum response time of data transmission.

6. (Original) The method of claim 1 wherein the quality of service metric comprises minimizing a weighted response time of data transmission.

7. (Original) The method of claim 1 wherein the quality of service metric comprises maximizing stretch of data transmission.

8. (Original) The method of claim 1 wherein the quality of service metric comprises maximizing flow of data transmission.

9. (Original) A method of scheduling data transmissions in a wireless data network, comprising:
(a) receiving a request to transmit data of a size s to a receiver;
(b) using the request size s and transmission characteristics to the receiver to select overall power and number of codes to assign to the request over an entire schedule, such that the power p and number of codes k minimizes the expression

$$\frac{P_j^c}{P} + \frac{k_j^c}{C}$$

where P is the total power that can be transmitted and C is the total number of codes that can be assigned to receivers in a time frame in the schedule; and
(c) allocating the results of step (b) in each scheduling frame in accordance with a quality of service metric.

10. (Original) The method of claim 9 wherein p and k are selected with respect to a resource-augmented demand.

11. (Original) The method of claim 9 wherein the quality of service metric comprises minimizing maximum response time of data transmission.

12. (Original) The method of claim 9 wherein the quality of service metric comprises minimizing a weighted response time of data transmission.

13. (Original) A method of scheduling data transmissions in a wireless data network, comprising:
(a) receiving a request to transmit data of a size s to a receiver;

(b) using the request size s and the transmission characteristics to the receiver to select a number of codes needed to complete the request using a power of P/C per code assuming a reduced demand; and
(c) rounding results from step (b) so that every selected codes is assigned a power that achieves a feasible data rate; and
(d) allocating the results of step (c) in each scheduling frame in accordance with a quality of service metric.

14. (Original) The method of claim 13 wherein, if a request satisfying the quality of service metric leaves unused power/codes in that scheduling frame, then another request is packed into the scheduling frame.

15. (Original) The method of claim 13 wherein the request with an earlier release time has higher priority over other requests.

16. (Currently Amended) The method of claim 14 wherein, if the request with the earliest release time leaves power/codes unused in that scheduling frame, then another request is [[is]] packed into the scheduling frame.

17. (Original) The method of claim 13 wherein the request with a highest value of power per code has higher priority over other requests.

18. (Original) The method of claim 17 wherein, if the request with the highest value of power per code leaves power/codes unused in that scheduling frame, then another request is packed into the scheduling frame.